#### Regional HIV/AIDS Epidemiologic Profile of Bristol County, Massachusetts: 2013

#### Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH). Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2013, this resulted in the removal of 3,529 HIV/AIDS cases, of which 914 have died and 2,615 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports. and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

# Table 1. Total number of people reported with HIV infection or AIDS<sup>1</sup> by mortality status on December 31, 2012: Bristol County, Massachusetts<sup>2</sup>

	N	%
People Living with HIV/AIDS	1,088	55%
People Reported with HIV or AIDS who are Deceased	905	45%
Total Number of People Reported with HIV Infection or		
AIDS	1,993	100%

<sup>&</sup>lt;sup>1</sup>Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999
<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

## Table 2. Average annual rate of HIV infection diagnosis from 2009 to 2011 and HIV/AIDS prevalence rate on 12/31/12<sup>1</sup>: Bristol County, Massachusetts<sup>2</sup>

Average annual HIV diagnosis rate from 2009–2011	Average rate per 100,000	Average annual number of HIV diagnoses
Bristol County, MA	6.5	35.7
Massachusetts Total	10.3	664.7

HIV/AIDS prevalence rate		Number of people
on 12/31/12	Rate per 100,000	living with HIV/AIDS
Bristol County, MA	198.4	1,088
Massachusetts Total	277.5	18,170

<sup>&</sup>lt;sup>1</sup> The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.
<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

<sup>&</sup>lt;sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 3. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2002–2011, Bristol County, Massachusetts<sup>3</sup>

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
			•
2002	931	39	68
2003	943	36	48
2004	966	27	50
2005	979	28	41
2006	991	24	36
2007	1,014	25	48
2008	1,019	30	35
2009	1,037	32	50
2010	1,036	31	30
2011	1,053	10	27

<sup>&</sup>lt;sup>1</sup> Number of people living with HIV/AIDS on 12/31 of each year

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

<sup>&</sup>lt;sup>2</sup>Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for

the most recently available ten-year period after the implementation of HIV infection reporting in 1999. 
<sup>3</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 4. People diagnosed with HIV infection from 2009–2011<sup>1</sup> and people living with HIV/AIDS on December 31, 2012 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Bristol County, Massachusetts<sup>2</sup>

	HIV Infection Diagr	noses	PLWH/A	
Gender:	N	%	N	%
Male	80	75%	703	65%
Female	27	25%	385	35%
Place of Birth:	N	%	N	%
US	84	79%	861	79%
Puerto Rico/US Dependency <sup>3</sup>	6	6%	104	10%
Non-US	17	16%	123	11%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	61	57%	660	61%
Black (non-Hispanic)	26	24%	206	19%
Hispanic/Latino	19	18%	210	19%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	39	36%	279	26%
Injection Drug Use (IDU)	15	14%	362	33%
MSM/IDU	7	<b></b> <sup>7</sup>	33	3%
Heterosexual Sex	1 <u>4</u>	13%	211	19%
Other	<b></b> <sup>7</sup>	<b></b> <sup>7</sup>	23	2%
Total Undetermined	37	35%	180	17%
Presumed Heterosexual Sex <sup>4</sup>	6	6%	55	5%
Undetermined <sup>5</sup> Output      Description:      Descripti	31	29%	125	11%
Age:	N	%	N	%
	At Diagnosis		On December 31,	
Under 13	0 <sup>7</sup>	0%	0	0%
13 to 19		'	5	<1%
20 to 24	15	14%	19	2%
25 to 29	8	7%	30	3%
30 to 34	18	17%	42	4%
35 to 39	9	8%	61	6%
40 to 44	15	14%	115	11%
45 to 49	18	17%	221	20%
50 to 54	7	7%	249	23%
55 to 59	7	7	194	18%
60+	9	8%	152	14%
Total <sup>6</sup>	107	100%	1,088	100%

<sup>1</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>3</sup> Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

<sup>&</sup>lt;sup>4</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>5</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>6</sup> Total includes Asian/Pacific Islander, American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>&</sup>lt;sup>7</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

### Table 5. People living with HIV/AIDS on December 31, 2012 by gender and race/ethnicity: Bristol County, Massachusetts<sup>1</sup>

	Male		Female	9
Race/Ethnicity:	N	%	N	%
White (non-Hispanic) Black (non-Hispanic) Hispanic/Latino Total <sup>2</sup>	461 113 123 <b>703</b>	66% 16% 17% <b>100%</b>	199 93 87 <b>385</b>	52% 24% 23% <b>100%</b>

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

### Table 6. People living with HIV/AIDS on December 31, 2012 by gender and exposure mode: Bristol County, Massachusetts<sup>1</sup>

	Male		Female	е
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	279	40%	N/A	N/A
Injection drug use (IDU)	209	30%	153	40%
MSM/IDU	33	5%	N/A	N/A
Heterosexual sex	64	9%	147	38%
Other	14	2%	9	2%
Total Undetermined	104	15%	76	20%
<ul> <li>Presumed heterosexual sex<sup>2</sup></li> </ul>	N/A	N/A	55	14%
<ul> <li>Undetermined<sup>3</sup></li> </ul>	104	15%	21	5%
Total	703	100%	385	100%

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Total includes Asian/Pacific Islander, American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

<sup>&</sup>lt;sup>2</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>3</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>

	Male		Female			
	N	%	N	%	Total	
2002	43	63%	25	37%	68	
2003	35	73%	13	27%	48	
2004	39	78%	11	22%	50	
2005	36	88%	5	12%	41	
2006	26	72%	10	28%	36	
2007	35	73%	13	27%	48	
2008	26	74%	9	26%	35	
2009	36	72%	14	28%	50	
2010	23	77%	7	23%	30	
2011	21	78%	6	22%	27	

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

### Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>

	White Non-Hispanic		Black Non-Hispanic		Hispanic Hispanic/Latino Total		Total <sup>3</sup>
	N	%	N	%	N	%	N
0000	40	<b>50</b> 0/	4.4	040/	4.4	040/	00
2002	40	59%	14	21%	14	21%	68
2003	35	73%	8	17%	5	10%	48
2004	25	50%	9	18%	16	32%	50
2005	28	68%	4	<b></b> <sup>4</sup>	4	4	41
2006	22	61%	4	4	<b></b> <sup>4</sup>	4	36
2007	29	60%	9	19%	9	19%	48
2008	23	66%	7	20%	5	14%	35
2009	25	50%	12	24%	13	26%	50
2010	16	53%	4	4	4	4	30
2011	20	74%	4	4	4	4	27

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-vear period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

<sup>&</sup>lt;sup>4</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>

	US		Puerto F US Depend	•	Non-U	S	Total
	N	%	N	%	N	%	N
2002 2003	45 40	66% 83%	11 <sup>4</sup>	16% <sup>4</sup>	12 <sup>4</sup>	18% <sup>4</sup>	68 48
2004 2005	33 35	66% 85%	10 <sup>4</sup>	20%	7 5	14% 12%	50 41
2006 2007	27 36	75% 75%	<sup>4</sup> <sup>4</sup> -4	<sup>4</sup> <sup>4</sup>	8	22% 17%	36 48
2008 2009 2010	26 37 25	74% 74% 83%	5 <sup>4</sup>	10%	6 8 <sup>4</sup>	17% 16% <sup>4</sup>	35 50 30
2011	22	81%	0	0%	5	19%	27

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<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

<sup>4</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values

may be suppressed to prevent back calculation.

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>

M	SM	ID	U	MS ID		нт	SX	Oth	ner	Pre HTS			eter- ied <sup>4</sup>	Total
N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2002 14 2003 14 2004 16 2005 20 2006 16 2007 17 2008 11 2009 18 2010 9 2011 12	29% 32% 49% 44% 35% 31% 36% 30%	26 11 10 9 5 10 6 7 5	38% 23% 20% 22% 14% 21% 17% 14%	-5 5 0 -5 0 0 5 0	<sup>5</sup> <sup>5</sup> 0% <sup>5</sup> 0% <sup>5</sup> 0% <sup>5</sup> 0%	16 10 8 <sup>5</sup> <sup>5</sup> 8 <sup>5</sup> 8	24% 21% 16% <sup>5</sup> <sup>5</sup> 17% <sup>5</sup> 16%	0 0  0 0  0 5 0  0	0% 0% <sup>5</sup> 0% 0% <sup>5</sup> 0% <sup>5</sup> 0%		-5 -5 -5 -5 -5 -5 -5 -5 -5 0%	7 7 12 5 10 9 8 13 11	10% 15% 24% 12% 28% 19% 23% 26% 37% 26%	68 48 50 41 36 48 35 50 30

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>4</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2002	29	68	43%
2003	17	48	35%
2004	18	50	36%
2005	17	41	41%
2006	13	36	36%
2007	18	48	38%
2008	15	35	43%
2009	23	50	46%
2010	9	30	30%
2011	7	27	26%

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

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<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999. Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Bristol County, Massachusetts, 1 2009–2011 2

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male Female	28 11	80 27	35% 41%
Race/Ethnicity:	N	N	%
White (non-Hispanic) Black (non-Hispanic) Hispanic/Latino Asian/Pacific Islander Other/Undetermined <sup>3</sup>	21 11 6 <sup>5</sup> <sup>5</sup>	61 26 19 <sup>5</sup> <sup>5</sup>	34% 42% 32% <sup>5</sup> <sup>5</sup>
Place of Birth:	N	N	%
US Puerto Rico/US Dependencies <sup>4</sup> Non-US <b>Total</b>	31 <sup>5</sup> <sup>5</sup> <b>39</b>	84 <sup>5</sup> <sup>5</sup> 107	37% <sup>5</sup> <sup>5</sup> <b>36%</b>

Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. <sup>3</sup> Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>&</sup>lt;sup>4</sup> Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

<sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional

values may be suppressed to prevent back calculation.